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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,794	02/01/2001	Norman G. Anderson	41039	2626

7590- 12/17/2003

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EXAMINER

YANG, NELSON C

ART UNIT	PAPER NUMBER
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1641

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DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,794

Applicant(s)

ANDERSON ET AL.

Examiner

Nelson Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-80 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9, drawn to a fiber bundle, classified in class 385, subclass 115.
 - II. Claims 10-15, 60-65, drawn to a method of forming a fiber bundle, classified in class 356, subclass 38.
 - III. Claims 16-18, drawn to a method of making an array, classified in class 356, subclass 340.
 - IV. Claims 19-21, drawn to an array, classified in class 385, subclass 89.
 - V. Claims 22-24, drawn to an array, classified in class 385, subclass 116.
 - VI. Claims 25-28, drawn to a binding assay, classified in class 356, subclass 460.
 - VII. Claim 29, drawn to a method of determining the alignment of fibers, classified in class 385, subclass 52.
 - VIII. Claims 30-37, drawn to a microarray, classified in class 435, subclass 7.1.
 - IX. Claims 38-39, drawn to a multiwell plate, classified in class 435, subclass 288.4.
 - X. Claim 40, drawn to an elongated fiber, classified in class 435, subclass 287.2.
 - XI. Claim 41, drawn to a solid phase construct, classified in class 436, subclass 535.
 - XII. Claims 42-43, drawn to a microarray and particles, classified in class 735, subclass 7.1.
 - XIII. Claims 44-55, drawn to an elongated fiber, fibrous structure, and fiber cross section, classified in class 385, subclass 100.

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- XIV. Claims 56-59, drawn to a microarray, classified in class 435, subclass 74.
- XV. Claims 66-73, drawn to a microarray, classified in class 436, subclass 518.
- XVI. Claims 74-80, drawn to a method of manufacturing a microarray, classified in class 385, subclass 120.

2. The inventions are distinct, each from the other because of the following reasons:

3. Inventions I, IV-V, and VIII-XV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions, and different effects. Invention I is a fiber bundle, invention IV is an array comprising a plurality of cells containing fibers or portions of fibers, invention V is an array comprising a fiber bundle cut transversely or at an angle and mounted to a solid support, with sections less than 1 cm thick, invention VIII is a microarray comprising a solid phase support and at least 500 cells per square centimeter, invention IX is a multiwell plate, invention X is an elongated fiber with a solid phase, invention XI is a solid phase construct, invention XII is an microarray containing a plurality of different cells containing a solid phase support, a porous particle and a medium, invention XIII is an elongated fiber, a fibrous structure and a fiber cross section, invention XIV is a microarray comprising a solid block on an inert solid support, and invention XV is a microarray comprising a solid phase having a surface with a plurality of structures bound to the surface.

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4. Inventions II, III, VI, VII, and XVI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions. Invention II is a method of forming a fiber bundle comprising the step of fixing the arrangement of fibers in the fiber bundle, invention III is a method of making an array, invention VI is a binding assay, invention VII is a method of determining the alignment of fibers, and invention XVI is a method of manufacturing a microarray.

5. Inventions II, III, XVI and I, IV-V, VIII-XV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the methods of II, III, and XVI can also be used to make materially different products such as fiber optic networks or fiber optic flashlights. Furthermore the inventions of I, IV, VIII, IX, XIV and XIV can be made by microfabrication and coating processes, invention V can be made using individual fibers that are cut and then bound together, and inventions X-XIII can be made by coating processes or by chemical treatments.

6. Inventions VI, VII and I, IV-V, VIII-XV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the binding assay of invention VI can be performed by a variety of other devices, such as

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enzyme immunosensors or by flow cytometers while the method of invention VII can be performed by a ruler or straight-edge. Furthermore, the inventions of groups I, IV, V, X, and XIII can be used to transmit light, while the inventions of groups VIII, IX, XI, XII, and XIV can be used to hold analytes or to monitor cells.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for one group is not required for others, restriction for examination purposes as indicated is proper.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (703) 305-4508. The examiner can normally be reached on 8:30-5:00.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V Le can be reached on (703) 305-3399. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

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Lonle
LONG V. LE
SUPERVISOR PATENT EXAMINER
TECHNOLOGY CENTER 100
12/15/87